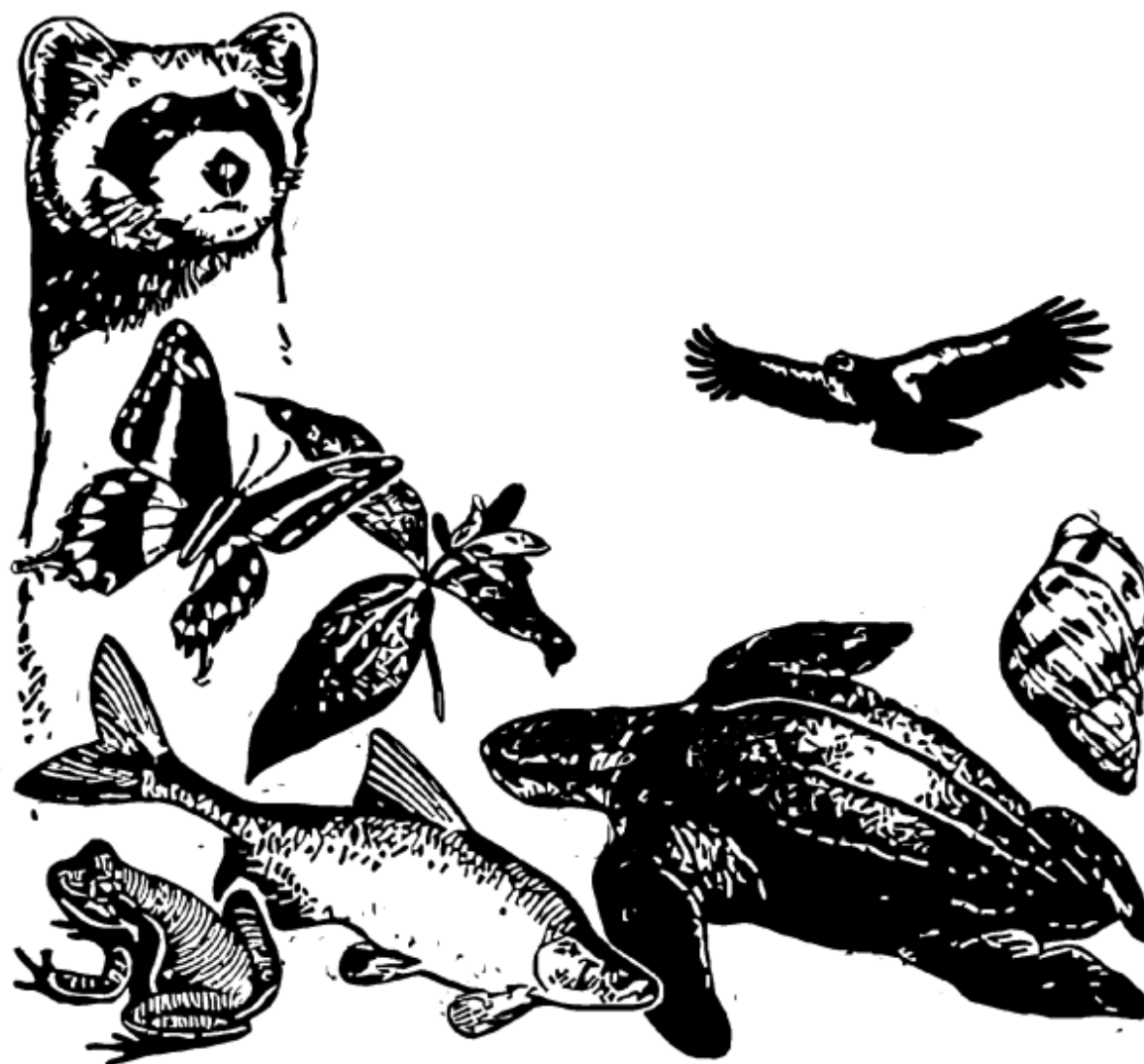


# Snuffbox Guidelines

## *Snuffbox Mussel*

Generated April 23, 2023 02:26 AM UTC, IPaC v6.90.0-rc5



## **Distribution of the Federally Endangered Snuffbox Mussel (*Epioblasma triquetra*) in West Virginia**

Freshwater mussels are found in gravelly substrates with moderate current. They feed by filtering food particles from the water column. Juvenile and adult freshwater mussels have been documented to feed on detritus, diatoms, phytoplankton, and zooplankton. Freshwater mussels rely on fish to complete their life histories. When mussel larvae (glochidia) are released into the water by adult females, they must attach themselves within a few days to the gills of an appropriate fish host, which they then parasitize for a short time while developing into juvenile mussels. Population losses and declines have occurred as a result of impoundments, navigation projects, water quality degradation from agricultural and industrial wastes, deforestation and other forms of habitat alteration, including gravel and sand dredging. Impacts that directly affect the species also include reduction or elimination of fish hosts.

### **COUNTIES AND STREAMS KNOWN TO SUPPORT THIS SPECIES:**

**Braxton County** – Cedar Creek, Elk River (Sutton Dam to slackwater below Coonskin Park), and Little Kanawha River

**Cabell County** – Ohio River

**Calhoun County** – Beech Fork, Henry’s Fork, Steer Creek, and West Fork Little Kanawha River

**Clay County** – Elk River (Sutton Dam to slackwater below Coonskin Park)

**Doddridge County** – Arnold Creek, Bluestone Creek, Bone Creek, Buckeye Creek, Indian Creek, Leatherbark Creek, McElroy Creek, McKim Creek, Meathouse Fork, Middle Island Creek, Otterslide Creek, Point Pleasant Creek, Sancho Creek, Slab Creek, South Fork Hughes River, Spruce Creek, and Toms Fork

**Gilmer County** – Cedar Creek, Fink Creek, Leading Creek, Little Kanawha River, and Steer Creek

**Harrison County** – West Fork River and Hackers Creek

**Jackson County** – Ohio River

**Kanawha County** – Big Sandy Creek and Elk River (Sutton Dam to slackwater below Coonskin Park)

**Lewis County** – Fink Creek, Hackers Creek, Leading Creek and West Fork River

**Marion County** – West Fork River

**Marshall County** – Fish Creek

**Mason County** – Ohio River

**Monongalia County** – Dunkard Creek

**Pleasants County** – Arnold Creek, Bluestone Creek, Buckeye Creek, Indian Creek, McKim Creek, Middle Island Creek, Ohio River, Point Pleasant Creek, Sancho Creek, and Sugar Creek

**Putnam County** – Kanawha River

**Ritchie County** – Addis Run, Bonds Creek, Devilhole Creek, Gillespie Run, Hughes River, North Fork Hughes River, South Fork Hughes River, and Spruce Creek

**Roane County** – Bone Creek, Henry’s Fork, Indian Creek, Leatherbark Creek, Otterslide Creek, Reedy Creek, Slab Creek, Spring Creek, Spruce Creek, South Fork Hughes River, and West Fork Little Kanawha River

**Tyler County** – Arnold Creek, Bluestone Creek, Buckeye Creek, Indian Creek, McElroy Creek, McKim Creek, Middle Island Creek, Ohio River, Point Pleasant Creek, and Sancho Creek

**Wayne County** – Ohio River

**Wetzel County** – Fishing Creek and Ohio River

**Wirt County** – Addis Run, Bonds Creek, Bone Creek, Devilhole Creek, Gillespie Run, Goose Creek, Hughes River, Indian Creek, Leatherbark Creek, Little Kanawha River, North Fork Hughes River, Otterslide Creek, Reedy Creek, Slab Creek, South Fork Hughes River, Spring Creek, Spruce Creek, and West Fork Little Kanawha River

**Wood County** – Little Kanawha River and Ohio River

*Based on your IPaC output, one of the following will be true for your project. Please follow the recommendations below for the option that your IPaC output indicates.*

## **IF YOUR PROJECT IS WITHIN CLOSE PROXIMITY TO A STREAM KNOWN TO SUPPORT THIS SPECIES:**

The aquatic habitats listed above represent the most current information on the known and potential distribution of the federally listed species described above. Once the consultation process is completed, and prior to conducting any project-related activities including those that could result in adverse impacts to the aquatic habitats listed above, including within tributaries streams that could affect the habitats listed above (e.g., projects that involve the placement of rock or other fill material into or adjacent to these habitats, the withdrawal or diversion of water, projects that involve crossing or boring beneath waterways, projects that could introduce sediment or toxic chemicals into waterways, or which could alter water temperature, streamside vegetation, etc.), please contact the U.S. Fish and Wildlife Service, West Virginia Field Office for more coordination and to conduct a more detailed project-specific review.

## **IF YOUR PROJECT IS WITHIN A WATERSHED KNOWN TO SUPPORT THIS SPECIES:**

The aquatic habitats listed above represent the most current information on the known and potential distribution of the federally listed species described above.

If your proposed project is of a small scale (e.g., culvert replacement, work within an existing right-of-way or otherwise previously developed area, streambank stabilization, etc.) and requires: minimal to no earth disturbance, no discharges into waterways, will not increase sedimentation or erosion, does not increase runoff into waterways, and will not divert or alter flows in waterways or create any impoundments, then no adverse effects to this species are anticipated as a result of the project.

However, if your project does not meet these criteria and/or involves work that may have larger-scale or ongoing effects (e.g., new pipeline, road, or transmission corridors, hydropower, dams, new housing development, coal mining, mineral or oil/gas extraction, etc.) that could result in adverse impacts to the aquatic habitats listed below including their tributaries (e.g., projects that involve the placement of rock or other fill material into or adjacent to these habitats, the withdrawal or diversion of water, projects that involve crossing or boring beneath waterways, projects that could introduce sediment or toxic chemicals into waterways, or which could alter water temperature, streamside vegetation, etc.), please contact the WVFO for more coordination and to conduct a more detailed project-specific review. Additionally, if you are uncertain if your project is larger-scale or will have ongoing effects to the species or its habitat, please contact the WVFO for further coordination.